

Source Water Assessment Report



Public Water Supply: GALENA, CITY OF

**Assessment Areas Include:
123, 124**



Kansas Department of Health and Environment
Bureau of Water Watershed Management Section
1000 SW Jackson St., Suite 420
Topeka, KS 66612-1367



Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114



Kansas Geological Survey University of Kansas
1930 Constant Ave.
Lawrence, KS 66047

Reports were generated with the Automated Source Water Assessment Tool (ASWAT). Assessments were completed online using ASWAT by hundreds of state employees, public water supply staff, and technical assistant providers throughout the State of Kansas.

Table Of Contents

[Report Description](#)

<u>Assessment Area 123</u>	<u>1.0</u>
<u>Executive Summary</u>	<u>1.1</u>
<u>Potential Sources</u>	<u>1.2</u>
<u>Added Sources</u>	<u>1.3</u>
<u>Potential Contaminants Summary</u>	<u>1.4</u>
<u>Potential Contaminants Listing</u>	<u>1.5</u>
<u>Protection Measures</u>	<u>1.6</u>
<u>Assessment Analysis</u>	<u>1.7</u>
<u>Site Comments</u>	<u>1.8</u>
<u>Added Site Comments</u>	<u>1.9</u>
<u>Analysis Question Comments</u>	<u>1.10</u>
<u>Assessment Area 124</u>	<u>2.0</u>
<u>Executive Summary</u>	<u>2.1</u>
<u>Potential Sources</u>	<u>2.2</u>
<u>Added Sources</u>	<u>2.3</u>
<u>Potential Contaminants Summary</u>	<u>2.4</u>
<u>Potential Contaminants Listing</u>	<u>2.5</u>
<u>Protection Measures</u>	<u>2.6</u>
<u>Assessment Analysis</u>	<u>2.7</u>
<u>Site Comments</u>	<u>2.8</u>
<u>Added Site Comments</u>	<u>2.9</u>
<u>Analysis Question Comments</u>	<u>2.10</u>

Report Description

Detailed Explanation of Entire Report:

The 1996 amendments to the Safe Drinking Water Act require each state to develop a Source Water Assessment Program (SWAP) and a Source Water Assessment (SWA) for each Public Water Supply (PWS) that treats and distributes raw source water. In Kansas there are 761 public water supplies that require SWAs. A SWA includes a delineation of the source water assessment area, an inventory of potential contaminant sources, and a susceptibility analysis.

A PWS can consist of one or more individual assessment areas that require different assessments. In general, an assessment area is delineated at a two-mile fixed radius for a groundwater well. A surface water intake assessment area is the upstream-drainage area (watershed), inside the state border. Additionally, an assessment area can consist of an individual well, group of wells, an individual surface water intake, or multiple surface water intakes.

After each assessment is completed a report is automatically generated using an Internet-based application called the Automated Source Water Assessment Tool (ASWAT). The individual assessment reports combine to form the entire SWA report for a PWS.

A map of each Assessment Area was also generated with ASWAT. However, for security reasons the maps are not included in this report. To obtain a copy of the map(s), please contact your local PWS.

All PWS reports will be available for viewing and downloading on KDHE's Watershed Management Section website(<http://www.kdhe.state.ks.us/nps>) in 2004.

GALENA, CITY OF Summary:

AA	Type	Diversion Id
123	Ground water multiple wells	004, 002, 001
124	Ground water single well	003

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**
Diversion Id's: **004, 002, 001**
Status: **Accepted**
Submit Date: **2003-02-26 11:02:58**

Executive Summary:

The Executive Summary gives the assessment area's Susceptibility Likelihood Score (SLS) for each contaminant of concern category.

SLS indicates which contaminant category is most likely to impact a given public water supply. Contaminants of concern for groundwater include microbiological, inorganic compounds, nitrates, synthetic organic compounds, pesticides, and volatile organic compounds. Contaminants of concern for surface water include microbiological, inorganic compounds, eutrophication – phosphorus, sedimentation, synthetic organic compounds, pesticides, and volatile organic compounds.

To determine the assessment area's susceptibility to contamination, a qualitative (semi-quantitative) screening level susceptibility analysis was designed that utilizes general assumptions and best professional judgement. It is a systematic procedure comprised of simple yes/no questions. Each question in the susceptibility analysis focuses on the presence or absence of potential pollution sources in the assessment area. SLS is most useful in helping the Public Water Supply (PWS) focus on water quality protection actions towards a contaminant category of concern. For example, if the SLS for microbiological contamination is high, relative to volatile organic compounds (VOC), water supply protection planners would conclude that the attention should be directed towards microbiological contaminant sources rather than VOC sources.

Executive Summary

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**

Susceptibility Likelihood Scores for Assessment Area

Contaminant Category	A	B	B*	C	C*	D
Susceptibility Likelihood Score – SLS	44	52	40	60	45	63
SLS Range	Low	Mid	Low	Mid	Low	Mid

A – Microbiological

B* – Nitrates

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

Susceptibility Likelihood Range

SLS Range	
0–50	Low Susceptibility
51–80	Moderate Susceptibility
81–100	High Susceptibility

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Assessment Area: **123**
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Submit Date: **2003-02-26 11:02:58**

Potential Sources:

The Potential Sources section lists all the sites that have been identified as potential sources of contamination.

Potential sources of contamination may include land uses, industry, or businesses that could generate or store chemicals/substances that could potentially contaminate the water supply only if released into the environment. Both unregulated sites from business location databases and regulated sites from various KDHE databases were compiled. Additional sites could have been added by an evaluator through the assessment process to supplement the original data.

The 1987 Standard Industrial Classifications (SIC) were used to identify potential contaminate sites. The SIC system classifies establishments into industries on the basis of the primary activities of the establishment.

Each assessment area is delineated with 3 assessment zones. These zones can be used to get a general understanding of the potential influence sites have based on proximity to the water supply. Zone A is a 100-foot radius around a groundwater well and a 1000-foot radius around a surface water intake. Zone B is a 2000-foot radius around wells and a hydrological delineated buffer around the surface water sources. Zone C is a 2-mile radius around wells and the balance of the watershed for intakes. The potential sources listed in this section are sorted to show all the potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business is identified in the study as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

The data for the potential sources of contamination was compiled from May through August in 2002. Some of the databases used were incomplete datasets that are continually being updated. Due to the incompleteness, inaccuracies, and new development, it is possible that sources of potential contamination that are in the assessment area are not included in the report. Inaccurate locations could also cause sources to show up in the assessment area that are not actually in the assessment. Additionally, duplication between the datasets could cause sites to show up multiple times in the assessment area.

Potential Sources

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
154136	Household Furniture Manufacturing	2519	B
154269	Engine Electrical Equipment Manufacturing	3694	B
154254	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
154155	Auto Truck Repair Service	7538	B
154285	Single-family Housing Construction	1521	C
100006	Dog, Cat, and Other Pet Food Manufacturing	2047	C
154137	Furniture and Fixtures Manufacturing	2599	C
154227	Newspapers Publishing and Printing	2711	C
154209	Commercial Printing NEC	2759	C
154138	Industrial Gases Manufacturing	2813	C
154139	Industrial Organic Chemicals Manufacturing	2869	C
154140	Chemical Preparations Manufacturing	2899	C
154283	Chemical Preparations Manufacturing	2899	C
154141	Construction Machinery Manufacturing	3531	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
154143	Machinery, Except Electrical Manufacturing	3599	C
154174	Machinery, Except Electrical Manufacturing	3599	C
154218	Machinery, Except Electrical Manufacturing	3599	C
154226	Machinery, Except Electrical Manufacturing	3599	C
154296	Machinery, Except Electrical Manufacturing	3599	C
154299	Machinery, Except Electrical Manufacturing	3599	C
154276	Manufacturing Industries, nec	3999	C
154281	Refuse Systems	4953	C
154282	Refuse Systems	4953	C
154146	Scrap and Waste Materials	5093	C
154175	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
154183	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
154223	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
154295	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
154246	Auto Truck Repair Service	7538	C
154198	Car Wash	7542	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Hazardous Waste Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Leaking Storage Tank Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000406	GALENA SUBSITE – OU 1 – DRINKING WATER	C301170909	C

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000410	GALENA SUBSITE – OU 5 – SURFACE WATER/GROUNDWATER	C301170917	C
7000411	GALENA SUBSITE OU 7 – RESIDENTIAL SOIL	C301170918	C

Regulated Solid Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
5000028	Cherokee C.L.A.W. Inc.	–S	C
5000421	City of Galena	0412–S	C
5000478	City of Galena	0462–S	C
5000542	City of Galena	0528–S	C
5000569	CInc.	0557–S	C
5000581	Tri–state Recycle Transfer Station	0569–S	C
5000586	City of Galena	0574–S	C
5000642	City of Galena	0631–S	C
5000667	City of Galena	0655–S	C
5000673	City of Galena	0661–S	C
5000730	American Disposal Services of MO, Inc.	0710–S	C
5000760	City of Galena	0738–S	C
5000898	Stretch Manufacturing, Inc.	2060–T	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6001612	GALENA MWTF	M–NE28–OO01	C

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Added Sources:

The Added Sources section lists all the sites that have been added as potential sources of contamination by an evaluator through the assessment process to supplement the original data.

The potential sources listed in this section are sorted to show the added potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business was added as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

Added Sources

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**

Added Potential Site Sources

Source No.	Source Name	SIC ID	Zone
9000108	Natural Gas pipeline	4600	C

Public Water Supply: **GALENA, CITY OF**
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Potential Contaminants Summary:

The Contaminants Summary shows the number of identified unregulated sources in the assessment area for each contaminant of concern category.

In order to obtain the number of sources for each category, a relationship was correlated between each Standard Industrial Classification (SIC) and the contaminant of concern categories. Each SIC was assessed and associated with contaminant categories. For example, if not managed properly, a car wash (SIC 7542) could potentially contaminate an intake because of inorganic compounds (IOC) and volatile organic compounds (VOC); thus, a car wash is associated with IOCs and VOCs.

A chart displays a count for each contaminant category. The sum for each category represents the total number of identified sources that have been associated with that particular contaminant category. However, the total number of identified sources does not include contaminants from the Added Sources. In our example, a car wash would be considered 2 sources of contamination. It would be a potential source of contamination for IOCs and for VOCs; thus, 1 would be added to the total number of sources in the VOC category and 1 would be added to the IOC category.

Potential Contaminants Summary

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**

Number of Unregulated Site Sources Identified for each Contaminant Category

MicroBiological	Pesticides	IOC's	SOC's	VOC's	Nitrates
4	2	26	5	26	3

A – Microbiological

B* – Nitrates

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

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Assessment Area: **123**
Diversion Id's: **004, 002, 001**
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Submit Date: **2003-02-26 11:02:58**

Potential Contaminants Listing:

The Potential Contaminants section lists the contaminant of concern category associated with each Standard Industrial Classification (SIC) found in an assessment area. A complete list of contaminant category codes are located at the bottom of this page.

The relationships defined between the Standard Industrial Classifications (SIC) and the contaminant of concern categories are displayed in a table format. Using our car wash example, the relationships can be better illustrated. A car wash could release IOC and VOC chemical substances. The connection is shown by indicating the SIC, 7542, and the associated contaminant categories, IOC (Category B) and VOC (Category D). However, the contaminants listed are not associated with any Added Sources.

The list is sorted by the SIC source description and it only shows unique SIC sources. For example, an assessment area can have 20 car washes in an assessment area, but the list is only going to show contaminant categories associated with car washes onetime. This is because all car washes have the same SIC and every car wash poses the same potential threat to water intakes.

A – Microbiological **B** – Inorganic Compounds **B1** – Eutrophication – Phosphorous
B2 – Sedimentation **B*** – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

Potential Contaminants Listing

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**

Unregulated Identified Site Sources and associated Potential Contaminant Category

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
7538	Auto Truck Repair Service	Inorganics, VOCs	B
"	"	"	D
7542	Car Wash	Inorganics, VOCs	B
"	"	"	B1
"	"	"	B2
"	"	"	D
2899	Chemical Preparations Manufacturing	VOCs, inorganics	D
3531	Construction Machinery Manufacturing	inorganics, VOCs	B
"	"	"	D
2047	Dog, Cat, and Other Pet Food Manufacturing	BOD, oil and grease, TSS	A
"	"	"	B
3694	Engine Electrical Equipment Manufacturing	inorganics, VOCs	B
"	"	"	D
2599	Furniture and Fixtures Manufacturing	TSS, VOCs	B
"	"	"	D
2519	Household Furniture Manufacturing	TSS, VOCs	B
"	"	"	D

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2813	Industrial Gases Manufacturing	NA	D
2869	Industrial Organic Chemicals Manufacturing	Metals and other inorganics	B
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	B
"	"	"	D
3999	Manufacturing Industries, nec	inorganics, VOCs	B
"	"	"	D
5093	Scrap and Waste Materials	Metals, TSS	B
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	A
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	B
"	"	"	D
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	B
"	"	"	C

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	D
4953	Refuse Systems	ALL	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C
"	"	"	C*
"	"	"	D

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**
Diversion Id's: **004, 002, 001**
Status: **Accepted**
Submit Date: **2003-02-26 11:02:58**

Protection Measures:

The Protection Measures section shows water quality protection measures for the Standard Industrial Classifications (SIC) identified in the assessment area.

Previous sections of this report are designed to show areas that Public Water Supplies (PWS) can focus on to improve the susceptibility of an assessment area. This section helps identify water quality protection measures that a PWS can use as guidance for implementing action for a potential contaminant site in the assessment area. It focuses on protection measures that can reduce the risk of contamination to the water supply.

This portion of the report only displays water quality protection measures for each type of SIC found in the assessment area. It does not display protection measures for each site in the assessment area because every SIC should have the same or similar water quality protection management practices. However, the protection measures listed are not associated with any Added Sources.

Protection Measures

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
7538	Auto Truck Repair Service	Inorganics, VOCs	Discharge to POTW. Manage oil products and used oil so that it is not in contact with water	40 CFR 442 and
7542	Car Wash	Inorganics, VOCs	Install and maintain sediment and grease traps where appropriate	40 CFR 442
2899	Chemical Preparations Manufacturing	VOCs, inorganics	Collect and pre-treat prior to discharge to a POTW	40 CFR 415 or 414 and State or federal Storm water pollution prevention regulations
3531	Construction Machinery Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
2047	Dog, Cat, and Other Pet Food Manufacturing	BOD, oil and grease, TSS	Wastewater pretreatment and/or discharge to a POTW	40 CFR 122 and State or federal Storm water pollution prevention regulations
3694	Engine Electrical Equipment Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 469 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2599	Furniture and Fixtures Manufacturing	TSS, VOCs	Discharge of process waters to POTW.	State or federal Storm water pollution prevention regulations
2519	Household Furniture Manufacturing	TSS, VOCs	Discharge of process waters to POTW.	State or federal Storm water pollution prevention regulations
2813	Industrial Gases Manufacturing	NA	NA	NA
2869	Industrial Organic Chemicals Manufacturing	Metals and other inorganics	Discharge process water to POTW	40 CFR 415 and State or federal Storm water pollution prevention regulations
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
3999	Manufacturing Industries, nec	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
5093	Scrap and Waste Materials	Metals, TSS	Minimize contact with storm water	State or federal Storm water pollution prevention regulations
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	Proper cleaning and disposal of household hazardous waste. Proper storage, application, and clean up of pesticides and fertilizers	KAR 28-48, KDHE, KDEM
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	Discharge to POTW. Recycle where appropriate. Properly maintain oil product and waste. Manage paint and solvent wastes properly	NA
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
4953	Refuse Systems	ALL	Store wastes properly in order to minimize contact with storm water.	Maintain the lagoon or storage vessel properly. Control storm water run on and runoff to minimize contamination of storm water

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Submit Date: **2003-02-26 11:02:58**

Assessment Analysis:

The Assessment Analysis section displays the numbers assigned to each contaminant of concern category for each question in the susceptibility analysis.

This analysis is based on a decision tree framework consisting of a series of yes/no questions. These questions consider the proximity of contaminant sources to the water supply intake, the type of contaminant, and the application of pollution prevention or water quality protection practices to sources of contamination. As the evaluator moves through the analytical framework, susceptibility points are accumulated based on the presence of contaminant sources in the assessment area.

After all the questions have been answered, the SLS is calculated for each contaminant of concern category. The SLS is determined by counting the number of contamination risk factors found to occur in the delineated assessment area and applying a multiplier to this number. Because the number of contaminant category risk factors is not equal, the multiplier is used to establish a common scale for the SLS of each contaminant category.

Assessment Analysis

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**

Ground Water Multiple Wells Analysis

A – Microbiological **B** – Inorganic Compounds
B* – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

No.	Question	Response	A	B	B*	C	C*	D
1	Is any well under the influence of surface water?	No	0	0	0	0	0	0
2	Do all PWS wells meet KS PWS water well construction standards?	Yes	0	0	0	0	0	0
3	Is any well less than 30 feet deep?	No	0	0	0	0	0	0
4	Is gravel pack within 20 feet of any well surface?	No	0	0	0	0	0	0
5	Does a PWS own or control all the areas around the wells?	Yes	0	0	0	0	0	0
6	Does Zone B consist entirely of native grass?	No	2	2	2	2	2	2
7	Is there a contaminated well in Zone B?	Yes	1	1	1	1	1	1
8	Is a class V UIC well present?	No	0	0	0	0	0	0
9	Are any commercial, industrial, or urban areas present in Zone B?	Yes	1	1	1	1	1	1
10	Does each industrial/commercial site and urban area have a water quality protection plan in place?	No	1	1	1	1	1	1
11	Are any non-farm home sites present in Zone B?	No	0	0	0	0	0	0
12	Do all the non-farm home sites have a water quality protection plan?	Yes	0	0	0	0	0	0
13	Are any farmsteads present in Zone B?	No	0	0	0	0	0	0
14	Do all farmsteads have a water quality protection plan?	Yes	0	0	0	0	0	0
15	Is there grazing livestock in Zone B?	No	0	0	0	0	0	0
16	Have all livestock producers implemented water quality protection measures?	Yes	0	0	0	0	0	0
17	Is there livestock confinement in Zone B?	No	0	0	0	0	0	0

No.	Question	Response	A	B	B*	C	C*	D
18	Is each confined animal feeding operation registered with KDHE?	Yes	0	0	0	0	0	0
19	Is there corn or grain sorghum production in Zone B?	No	0	0	0	0	0	0
20	Are corn/grain sorghum nutrient and pesticide management plans in use for each site?	Yes	0	0	0	0	0	0
21	Are any orchards present in Zone B?	No	0	0	0	0	0	0
22	Are orchard nutrient and pesticide management plans in use for each site?	Yes	0	0	0	0	0	0
23	Are there unsewered developments (concentrations of lagoons or septic systems) present in Zone B?	No	0	0	0	0	0	0
24	Is there a railroad or major highway in Zone B or C?	Yes	0	1	1	1	1	1
25	Is there oil production in Zone B or C?	Yes	0	1	0	1	0	1
26	Do coarse textured soils predominate Zones A, B and C?	Yes	1	1	1	1	1	1
27	Is an irrigation well located in Zone B or C?	No	0	0	0	0	0	0
28	Is a wastewater treatment facility in Zone B or C?	Yes	1	1	1	1	1	1
29	Is a solid waste landfill in Zone B or C?	Yes	1	1	1	1	1	1
30	Are there unplugged, abandoned water wells present in Zone C?	Yes	2	1	1	1	1	1
31	Are any commercial, industrial, or urban area present in Zone C?	Yes	1	1	1	1	1	1
32	Does each industrial/commercial site and urban area have a water quality protection plan in place?	No	1	1	1	1	1	1
33	Is there livestock confinement in Zone C?	No	0	0	0	0	0	0
34	Is each confined livestock facility registered with KDHE?	Yes	0	0	0	0	0	0
35	Do all the livestock producers have water quality protection measures in place?	Yes	0	0	0	0	0	0
36	Are cropland nutrient management plans in place?	No	0	0	1	0	0	0
37	Are cropland pesticide management plans in place?	No	0	0	0	0	1	0
38	Does a perennial stream flow into Zone C?	Yes	1	1	1	1	1	1
39	Are watershed water quality protection plans in place?	No	1	1	1	1	1	1

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**
Diversion Id's: **004, 002, 001**
Status: **Accepted**
Submit Date: **2003-02-26 11:02:58**

Site Comments:

The Site Comments section lists all the comments that were added for the potential sources of contamination found in the assessment area.

Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding detail to the sites that can be referenced for more information.

This local information may include comments on potential contamination threats (or lack there of), local water quality protection initiatives, etc. Adding comments are optional and are mainly focused on sources in areas that could have the greatest impact on water supply if a spill or release occurred in the environment. It is left to the discretion of the PWS and/or source water assessment committee to add comments.

Site Comments

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**

Comments for Unregulated Sites

Did Not Receive Any Comments

Comments for Regulated Confined Animal Feeding Operations Sites

Did Not Receive Any Comments

Comments for Regulated Hazardous Waste Sites

Did Not Receive Any Comments

Comments for Regulated Leaking Storage Tank Sites

Did Not Receive Any Comments

Comments for Regulated Identified Contaminated Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
GALENA SUBSITE – OU 1 – DRINKING WATER	7000406	The site is a historic lead and zinc mining district. The main contaminants of concern in shallow groundwater, surface water and soils are lead, zinc, and cadmium.	Nicole Fisher

Comments for Regulated Identified Contaminated Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
GALENA SUBSITE – OU 5 – SURFACE WATER/GROUNDWATER	7000410	The site is a historic lead and zinc mining district. The main contaminants of concern in shallow groundwater, surface water and soils are lead, zinc, and cadmium.	Nicole Fisher
GALENA SUBSITE OU 7 – RESIDENTIAL SOIL	7000411	The site is a historic lead and zinc mining district. The main contaminants of concern in shallow groundwater, surface water and soils are lead, zinc, and cadmium.	Nicole Fisher

Comments for Regulated Solid Waste Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
City of Galena	5000478	This construction/demolition facility has been closed	Nicole Fisher
City of Galena	5000667	This construction/demolition facility has been closed	Nicole Fisher
Stretch Manufacturing, Inc.	5000898	Tire processing facility closed 5/1/2002	Nicole Fisher

Comments for Regulated Waste Water Sites

Did Not Receive Any Comments

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**
Diversion Id's: **004, 002, 001**
Status: **Accepted**
Submit Date: **2003-02-26 11:02:58**

Added Site Comments:

The Added Site Comments section lists the comments for why sites were added as a potential source of contamination found to the assessment area.

Added Site Comments

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**

Comments for Added Contaminant Sites

Added Contaminant Site Name	Site No.	Site Comments	Author
Natural Gas pipeline	9000108	This information was obtained from the Wellhead Protection Plan.	Nicole Fisher

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**
Diversion Id's: **004, 002, 001**
Status: **Accepted**
Submit Date: **2003-02-26 11:02:58**

Analysis Question Comments:

The Analysis Question Comments section lists all the comments that were added during analysis portion of the assessment, in which a series of yes/no questions were asked.

Evaluators have the option to add comments to questions to clarify why a response was given or to give more details to a question. Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding clarification and details that could not be identified with a simple yes or no response.

Analysis Question Comments

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **123**

Comments for Analysis Questions

Analysis Question	Question Comments	Author
Did Not Receive Any Comments		

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**
Diversion Id's: **003**
Status: **Accepted**
Submit Date: **2003-02-26 11:07:32**

Executive Summary:

The Executive Summary gives the assessment area's Susceptibility Likelihood Score (SLS) for each contaminant of concern category.

SLS indicates which contaminant category is most likely to impact a given public water supply. Contaminants of concern for groundwater include microbiological, inorganic compounds, nitrates, synthetic organic compounds, pesticides, and volatile organic compounds. Contaminants of concern for surface water include microbiological, inorganic compounds, eutrophication – phosphorus, sedimentation, synthetic organic compounds, pesticides, and volatile organic compounds.

To determine the assessment area's susceptibility to contamination, a qualitative (semi-quantitative) screening level susceptibility analysis was designed that utilizes general assumptions and best professional judgement. It is a systematic procedure comprised of simple yes/no questions. Each question in the susceptibility analysis focuses on the presence or absence of potential pollution sources in the assessment area. SLS is most useful in helping the Public Water Supply (PWS) focus on water quality protection actions towards a contaminant category of concern. For example, if the SLS for microbiological contamination is high, relative to volatile organic compounds (VOC), water supply protection planners would conclude that the attention should be directed towards microbiological contaminant sources rather than VOC sources.

Executive Summary

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**

Susceptibility Likelihood Scores for Assessment Area

Contaminant Category	A	B	B*	C	C*	D
Susceptibility Likelihood Score – SLS	38	45	35	52	39	55
SLS Range	Low	Low	Low	Mid	Low	Mid

A – Microbiological

B* – Nitrates

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

Susceptibility Likelihood Range

SLS Range	
0–50	Low Susceptibility
51–80	Moderate Susceptibility
81–100	High Susceptibility

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**
Diversion Id's: **003**
Status: **Accepted**
Submit Date: **2003-02-26 11:07:32**

Potential Sources:

The Potential Sources section lists all the sites that have been identified as potential sources of contamination.

Potential sources of contamination may include land uses, industry, or businesses that could generate or store chemicals/substances that could potentially contaminate the water supply only if released into the environment. Both unregulated sites from business location databases and regulated sites from various KDHE databases were compiled. Additional sites could have been added by an evaluator through the assessment process to supplement the original data.

The 1987 Standard Industrial Classifications (SIC) were used to identify potential contaminate sites. The SIC system classifies establishments into industries on the basis of the primary activities of the establishment.

Each assessment area is delineated with 3 assessment zones. These zones can be used to get a general understanding of the potential influence sites have based on proximity to the water supply. Zone A is a 100-foot radius around a groundwater well and a 1000-foot radius around a surface water intake. Zone B is a 2000-foot radius around wells and a hydrological delineated buffer around the surface water sources. Zone C is a 2-mile radius around wells and the balance of the watershed for intakes. The potential sources listed in this section are sorted to show all the potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business is identified in the study as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

The data for the potential sources of contamination was compiled from May through August in 2002. Some of the databases used were incomplete datasets that are continually being updated. Due to the incompleteness, inaccuracies, and new development, it is possible that sources of potential contamination that are in the assessment area are not included in the report. Inaccurate locations could also cause sources to show up in the assessment area that are not actually in the assessment. Additionally, duplication between the datasets could cause sites to show up multiple times in the assessment area.

Potential Sources

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
100006	Dog, Cat, and Other Pet Food Manufacturing	2047	C
154136	Household Furniture Manufacturing	2519	C
154137	Furniture and Fixtures Manufacturing	2599	C
154227	Newspapers Publishing and Printing	2711	C
154209	Commercial Printing NEC	2759	C
154138	Industrial Gases Manufacturing	2813	C
154139	Industrial Organic Chemicals Manufacturing	2869	C
154140	Chemical Preparations Manufacturing	2899	C
154283	Chemical Preparations Manufacturing	2899	C
154141	Construction Machinery Manufacturing	3531	C
154143	Machinery, Except Electrical Manufacturing	3599	C
154174	Machinery, Except Electrical Manufacturing	3599	C
154218	Machinery, Except Electrical Manufacturing	3599	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
154226	Machinery, Except Electrical Manufacturing	3599	C
154296	Machinery, Except Electrical Manufacturing	3599	C
154299	Machinery, Except Electrical Manufacturing	3599	C
154269	Engine Electrical Equipment Manufacturing	3694	C
154276	Manufacturing Industries, nec	3999	C
154281	Refuse Systems	4953	C
154282	Refuse Systems	4953	C
154146	Scrap and Waste Materials	5093	C
154175	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
154183	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
154223	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
154254	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
154295	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
154155	Auto Truck Repair Service	7538	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
154246	Auto Truck Repair Service	7538	C
154198	Car Wash	7542	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Hazardous Waste Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Leaking Storage Tank Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000406	GALENA SUBSITE – OU 1 – DRINKING WATER	C301170909	C

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000410	GALENA SUBSITE – OU 5 – SURFACE WATER/GROUNDWATER	C301170917	C
7000411	GALENA SUBSITE OU 7 – RESIDENTIAL SOIL	C301170918	C

Regulated Solid Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
5000028	Cherokee C.L.A.W. Inc.	–S	C
5000421	City of Galena	0412–S	C
5000478	City of Galena	0462–S	C
5000542	City of Galena	0528–S	C
5000569	CInc.	0557–S	C
5000581	Tri–state Recycle Transfer Station	0569–S	C
5000586	City of Galena	0574–S	C
5000642	City of Galena	0631–S	C
5000667	City of Galena	0655–S	C
5000673	City of Galena	0661–S	C
5000730	American Disposal Services of MO, Inc.	0710–S	C
5000760	City of Galena	0738–S	C
5000898	Stretch Manufacturing, Inc.	2060–T	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000193	ALLCO CHEMICAL CORPORATION (GALENA)	I–NE28–PO03	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000194	INSPEC USA (ALLCO CHEMICAL)	I-NE28-PO04	C
6001612	GALENA MWTF	M-NE28-OO01	C

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**
Diversion Id's: **003**
Status: **Accepted**
Submit Date: **2003-02-26 11:07:32**

Added Sources:

The Added Sources section lists all the sites that have been added as potential sources of contamination by an evaluator through the assessment process to supplement the original data.

The potential sources listed in this section are sorted to show the added potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business was added as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

Added Sources

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**

Added Potential Site Sources

Source No.	Source Name	SIC ID	Zone
Did Not Add Any Site Sources			

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**
Diversion Id's: **003**
Status: **Accepted**
Submit Date: **2003-02-26 11:07:32**

Potential Contaminants Summary:

The Contaminants Summary shows the number of identified unregulated sources in the assessment area for each contaminant of concern category.

In order to obtain the number of sources for each category, a relationship was correlated between each Standard Industrial Classification (SIC) and the contaminant of concern categories. Each SIC was assessed and associated with contaminant categories. For example, if not managed properly, a car wash (SIC 7542) could potentially contaminate an intake because of inorganic compounds (IOC) and volatile organic compounds (VOC); thus, a car wash is associated with IOCs and VOCs.

A chart displays a count for each contaminant category. The sum for each category represents the total number of identified sources that have been associated with that particular contaminant category. However, the total number of identified sources does not include contaminants from the Added Sources. In our example, a car wash would be considered 2 sources of contamination. It would be a potential source of contamination for IOCs and for VOCs; thus, 1 would be added to the total number of sources in the VOC category and 1 would be added to the IOC category.

Potential Contaminants Summary

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**

Number of Unregulated Site Sources Identified for each Contaminant Category

MicroBiological	Pesticides	IOC's	SOC's	VOC's	Nitrates
3	2	26	4	26	2

A – Microbiological

B* – Nitrates

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**
Diversion Id's: **003**
Status: **Accepted**
Submit Date: **2003-02-26 11:07:32**

Potential Contaminants Listing:

The Potential Contaminants section lists the contaminant of concern category associated with each Standard Industrial Classification (SIC) found in an assessment area. A complete list of contaminant category codes are located at the bottom of this page.

The relationships defined between the Standard Industrial Classifications (SIC) and the contaminant of concern categories are displayed in a table format. Using our car wash example, the relationships can be better illustrated. A car wash could release IOC and VOC chemical substances. The connection is shown by indicating the SIC, 7542, and the associated contaminant categories, IOC (Category B) and VOC (Category D). However, the contaminants listed are not associated with any Added Sources.

The list is sorted by the SIC source description and it only shows unique SIC sources. For example, an assessment area can have 20 car washes in an assessment area, but the list is only going to show contaminant categories associated with car washes onetime. This is because all car washes have the same SIC and every car wash poses the same potential threat to water intakes.

A – Microbiological **B** – Inorganic Compounds **B1** – Eutrophication – Phosphorous
B2 – Sedimentation **B*** – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

Potential Contaminants Listing

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**

Unregulated Identified Site Sources and associated Potential Contaminant Category

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
7538	Auto Truck Repair Service	Inorganics, VOCs	B
"	"	"	D
7542	Car Wash	Inorganics, VOCs	B
"	"	"	B1
"	"	"	B2
"	"	"	D
2899	Chemical Preparations Manufacturing	VOCs, inorganics	D
3531	Construction Machinery Manufacturing	inorganics, VOCs	B
"	"	"	D
2047	Dog, Cat, and Other Pet Food Manufacturing	BOD, oil and grease, TSS	A
"	"	"	B
3694	Engine Electrical Equipment Manufacturing	inorganics, VOCs	B
"	"	"	D
2599	Furniture and Fixtures Manufacturing	TSS, VOCs	B
"	"	"	D
2519	Household Furniture Manufacturing	TSS, VOCs	B
"	"	"	D

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2813	Industrial Gases Manufacturing	NA	D
2869	Industrial Organic Chemicals Manufacturing	Metals and other inorganics	B
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	B
"	"	"	D
3999	Manufacturing Industries, nec	inorganics, VOCs	B
"	"	"	D
5093	Scrap and Waste Materials	Metals, TSS	B
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	B
"	"	"	D
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
4953	Refuse Systems	ALL	A
"	"	"	B
"	"	"	B1
"	"	"	B2

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
4953	Refuse Systems	ALL	B*
"	"	"	C
"	"	"	C*
"	"	"	D

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**
Diversion Id's: **003**
Status: **Accepted**
Submit Date: **2003-02-26 11:07:32**

Protection Measures:

The Protection Measures section shows water quality protection measures for the Standard Industrial Classifications (SIC) identified in the assessment area.

Previous sections of this report are designed to show areas that Public Water Supplies (PWS) can focus on to improve the susceptibility of an assessment area. This section helps identify water quality protection measures that a PWS can use as guidance for implementing action for a potential contaminant site in the assessment area. It focuses on protection measures that can reduce the risk of contamination to the water supply.

This portion of the report only displays water quality protection measures for each type of SIC found in the assessment area. It does not display protection measures for each site in the assessment area because every SIC should have the same or similar water quality protection management practices. However, the protection measures listed are not associated with any Added Sources.

Protection Measures

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
7538	Auto Truck Repair Service	Inorganics, VOCs	Discharge to POTW. Manage oil products and used oil so that it is not in contact with water	40 CFR 442 and
7542	Car Wash	Inorganics, VOCs	Install and maintain sediment and grease traps where appropriate	40 CFR 442
2899	Chemical Preparations Manufacturing	VOCs, inorganics	Collect and pre-treat prior to discharge to a POTW	40 CFR 415 or 414 and State or federal Storm water pollution prevention regulations
3531	Construction Machinery Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
2047	Dog, Cat, and Other Pet Food Manufacturing	BOD, oil and grease, TSS	Wastewater pretreatment and/or discharge to a POTW	40 CFR 122 and State or federal Storm water pollution prevention regulations
3694	Engine Electrical Equipment Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 469 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2599	Furniture and Fixtures Manufacturing	TSS, VOCs	Discharge of process waters to POTW.	State or federal Storm water pollution prevention regulations
2519	Household Furniture Manufacturing	TSS, VOCs	Discharge of process waters to POTW.	State or federal Storm water pollution prevention regulations
2813	Industrial Gases Manufacturing	NA	NA	NA
2869	Industrial Organic Chemicals Manufacturing	Metals and other inorganics	Discharge process water to POTW	40 CFR 415 and State or federal Storm water pollution prevention regulations
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
3999	Manufacturing Industries, nec	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
5093	Scrap and Waste Materials	Metals, TSS	Minimize contact with storm water	State or federal Storm water pollution prevention regulations
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	Discharge to POTW. Recycle where appropriate. Properly maintain oil product and waste. Manage paint and solvent wastes properly	NA
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
4953	Refuse Systems	ALL	Store wastes properly in order to minimize contact with storm water.	Maintain the lagoon or storage vessel properly. Control storm water run on and runoff to minimize contamination of storm water

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**
Diversion Id's: **003**
Status: **Accepted**
Submit Date: **2003-02-26 11:07:32**

Assessment Analysis:

The Assessment Analysis section displays the numbers assigned to each contaminant of concern category for each question in the susceptibility analysis.

This analysis is based on a decision tree framework consisting of a series of yes/no questions. These questions consider the proximity of contaminant sources to the water supply intake, the type of contaminant, and the application of pollution prevention or water quality protection practices to sources of contamination. As the evaluator moves through the analytical framework, susceptibility points are accumulated based on the presence of contaminant sources in the assessment area.

After all the questions have been answered, the SLS is calculated for each contaminant of concern category. The SLS is determined by counting the number of contamination risk factors found to occur in the delineated assessment area and applying a multiplier to this number. Because the number of contaminant category risk factors is not equal, the multiplier is used to establish a common scale for the SLS of each contaminant category.

Assessment Analysis

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**

Ground Water Single Well Analysis

A – Microbiological **B** – Inorganic Compounds
B* – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

No.	Question	Response	A	B	B*	C	C*	D
1	Is the well under the influence of surface water?	No	0	0	0	0	0	0
2	Does the well meet KS water well construction standards?	Yes	0	0	0	0	0	0
3	Is the depth of the well less than 30 feet?	No	0	0	0	0	0	0
4	Are there unplugged, abandoned water wells present in Zone A?	No	0	0	0	0	0	0
5	Is there gravel pack within 20 feet of the surface?	No	0	0	0	0	0	0
6	Does a PWS own or control Zone A?	Yes	0	0	0	0	0	0
7	Does Zone A consist entirely of native grass?	No	1	1	1	1	1	1
8	Is there a contaminated well in the Zone A?	No	0	0	0	0	0	0
9	Is a class V UIC well present?	No	0	0	0	0	0	0
10	Are any commercial, industrial, or urban areas present in Zone B?	Yes	1	1	1	1	1	1
11	Does each industrial/commercial site and urban area have a water quality protection plan in place?	No	1	1	1	1	1	1
12	Are any non-farm home sites present in Zone B?	No	0	0	0	0	0	0
13	Do all the non-farm home sites have a water quality protection plan?	Yes	0	0	0	0	0	0
14	Are any farmsteads present in Zone B?	No	0	0	0	0	0	0
15	Do all farmsteads have a water quality protection plan?	Yes	0	0	0	0	0	0
16	Does Zone B consist entirely of native grass?	No	1	1	1	1	1	1
17	Is there grazing livestock in Zone B?	No	0	0	0	0	0	0

No.	Question	Response	A	B	B*	C	C*	D
18	Do all the livestock producers have water quality protection measures in place?	Yes	0	0	0	0	0	0
19	Is there livestock confinement in Zone B?	No	0	0	0	0	0	0
20	Is each confined animal feeding operation registered with KDHE?	Yes	0	0	0	0	0	0
21	Is there corn or grain sorghum production in Zone B?	No	0	0	0	0	0	0
22	Are corn/grain sorghum nutrient and pesticide management plans in use for each site?	Yes	0	0	0	0	0	0
23	Are any orchards present in Zone B?	No	0	0	0	0	0	0
24	Are orchard nutrient and pesticide plans in use for each site?	Yes	0	0	0	0	0	0
25	Are there unsewered developments (concentrations of lagoons or septic systems) present in Zone B?	No	0	0	0	0	0	0
26	Is there a railroad or major highway in Zone B or C?	Yes	0	1	1	1	1	1
27	Is there oil production in Zone B or C?	Yes	0	1	0	1	0	1
28	Do coarse textured soils predominate Zones A, B and C?	Yes	1	1	1	1	1	1
29	Is an irrigation well located in Zone B or C?	No	0	0	0	0	0	0
30	Is a wastewater treatment facility in Zone B or C?	Yes	1	1	1	1	1	1
31	Is a solid waste landfill in Zone B or C?	Yes	1	1	1	1	1	1
32	Are there unplugged, abandoned water wells present in Zone B or C?	Yes	1	0	0	0	0	0
33	Are any commercial, industrial, or urban areas present in Zone C?	Yes	1	1	1	1	1	1
34	Are water quality protection plans in use for each site/area?	No	1	1	1	1	1	1
35	Is there livestock confinement in Zone C?	No	0	0	0	0	0	0
36	Is each confined livestock facility registered with KDHE?	Yes	0	0	0	0	0	0
37	Do all the livestock producers have water quality protection measures in place?	Yes	0	0	0	0	0	0
38	Are cropland nutrient management plans in place?	No	0	0	1	0	0	0
39	Are cropland pesticide management plans in place?	No	0	0	0	0	1	0
40	Does a perennial stream flow into Zone C?	Yes	1	1	1	1	1	1
41	Are watershed water quality protection plans in place?	No	1	1	1	1	1	1

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**
Diversion Id's: **003**
Status: **Accepted**
Submit Date: **2003-02-26 11:07:32**

Site Comments:

The Site Comments section lists all the comments that were added for the potential sources of contamination found in the assessment area.

Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding detail to the sites that can be referenced for more information.

This local information may include comments on potential contamination threats (or lack there of), local water quality protection initiatives, etc. Adding comments are optional and are mainly focused on sources in areas that could have the greatest impact on water supply if a spill or release occurred in the environment. It is left to the discretion of the PWS and/or source water assessment committee to add comments.

Site Comments

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**

Comments for Unregulated Sites

Did Not Receive Any Comments

Comments for Regulated Confined Animal Feeding Operations Sites

Did Not Receive Any Comments

Comments for Regulated Hazardous Waste Sites

Did Not Receive Any Comments

Comments for Regulated Leaking Storage Tank Sites

Did Not Receive Any Comments

Comments for Regulated Identified Contaminated Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
GALENA SUBSITE – OU 1 – DRINKING WATER	7000406	The site is a historic lead and zinc mining district. The main contaminants of concern in shallow groundwater, surface water and soils are lead, zinc, and cadmium.	Nicole Fisher

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Comments for Regulated Solid Waste Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
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City of Galena	5000667	This construction/demolition facility has been closed	Nicole Fisher
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Comments for Regulated Waste Water Sites

Did Not Receive Any Comments

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**
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Submit Date: **2003-02-26 11:07:32**

Added Site Comments:

The Added Site Comments section lists the comments for why sites were added as a potential source of contamination found to the assessment area.

Added Site Comments

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**

Comments for Added Contaminant Sites

Added Contaminant Site Name	Site No.	Site Comments	Author
Did Not Receive Any Comments			

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**
Diversion Id's: **003**
Status: **Accepted**
Submit Date: **2003-02-26 11:07:32**

Analysis Question Comments:

The Analysis Question Comments section lists all the comments that were added during analysis portion of the assessment, in which a series of yes/no questions were asked.

Evaluators have the option to add comments to questions to clarify why a response was given or to give more details to a question. Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding clarification and details that could not be identified with a simple yes or no response.

Analysis Question Comments

Public Water Supply: **GALENA, CITY OF**
Assessment Area: **124**

Comments for Analysis Questions

Analysis Question	Question Comments	Author
Did Not Receive Any Comments		